

LISTS OF CLOSURE ITEMS, WORKS-IN-PROGRESS AND DATA/INFORMATION ITEMS  
FOR SEPTEMBER CC MEETING

1. Combustion Turbines WG Items
2. Reciprocating IC Engines WG Items
3. Boilers WG Items
4. Process Heaters WG Items
5. Incinerators WG Items
6. Testing and Monitoring Protocol WG Items
7. General ICCR Items

**Combustion Turbine Work Group**  
**Items to be submitted to the Coordinating Committee at the September meeting**

**Closure Items**

White Paper: “Cost-Effectiveness of Oxidation Catalyst Control of Hazardous Air Pollutant (HAP) Emissions From Stationary Combustion Turbines”

- An assessment of the CTWG with regard to the potential cost-effectiveness of oxidation catalysts used to control hazardous air pollutant (HAP) emissions from combustion turbines

**Works In Progress**

Considerations for Gas-Fired Combustion Turbines MACT

- Items for EPA to consider concerning MACT for gas-fired combustion turbines

Model Turbines and Control Alternatives Cost Analyses for Existing and New Sources (Not available electronically)

- Includes model turbine development considerations and control cost information

CTWG Pollution Prevention Considerations

- Conclusions reached by the CTWG concerning the concepts developed by the Pollution Prevention Subgroup

Subcategorization Report

- Summary of subcategorization discussions and conclusions within the CTWG

HAPs vs. Criteria Pollutants Report

- Summary of CTWG discussions on HAPs vs. Criteria pollutants tradeoffs

Preliminary Results from Natural Gas-Fired Combustion Turbine Testing

- Summary of a test conducted on a natural gas-fired turbine equipped with a CO catalyst as part of a program sponsored by API/GRI/SoCal

**Data/Information**

Refined Inventory Database

- Includes version of database that has been made more usable for CTWG analyses

Emissions Database

- Includes latest version of database with all complete source test reports that have passed CTWG QA/QC procedures

HAP Technology Workshop Documents (Not available electronically)

- Documents from the CTWG’s HAP Technology Workshop held on July 25, 1997 in Long Beach, California

## **Reciprocating Internal Combustion Engine Work Group**

### **List of Items for September 1998 Coordinating Committee Meeting**

#### **Closure**

##### **White Paper: Rich Burn engine definition**

This paper documents the discussions that occurred within the RICE WG regarding a regulatory definition for “Rich Burn engines”. Stationary RICE operate with various air to fuel ratios, and, in general, may be classified as either rich or lean stoichiometry.

##### **White Paper: The Assessment of RICE Emissions Database**

This paper presents the results of the RICE WG’s assessment of the ICCR Emissions Database for RICE. The assessment of the RICE Emissions Database was conducted in the context of determining the adequacy of the emissions data in the database to support the MACT rule development for stationary RICE.

##### **White Paper: Above the Floor MACT for Digester and Landfill Gas**

The purpose of this document is to present EPA with guidance on the ATF technologies that should be considered for further evaluation for controlling HAPs from RICE burning digester or landfill gas. Part of this document will not be available electronically.

#### **Work in Progress**

##### **White Paper: Pollution Prevention for RICE**

This paper presents the RICE WG’s review of the CC P2 Subgroup’s regulatory recommendations with regard to stationary RICE.

##### **Definitions**

This paper presents the summary of proposed definitions for RICE. It also includes comments received on these definitions.

##### **Cost of Control Catalysts**

The RICE WG made an effort to gather control cost information for add-on control devices which utilize oxidation, due to their potential for HAP destruction.

##### **White Paper: New Source MACT for RICE**

This paper presents the RICE WG's ideas that should be considered when MACT for new sources is developed.

### **Information/Data**

#### Emissions Database

Includes most recent version of the ICCR Emissions Database for RICE with all complete source test reports that have passed QA/QC procedures.

#### CARB test reports for HAPS

These are the additional source test reports received from CARB and are not available electronically.

#### Inventory/Population Database

Includes version of the database with changes, corrections, and additions made by the RICE WG.

#### Federal units population estimates

This is a comparison between the ICCR Inventory/Population Database and the federal units population for RICE.

# CLOSURE ITEMS, WORKS-IN-PROGRESS, AND DATA/INFORMATION FOR COORDINATING COMMITTEE REVIEW

-- BOILER WORK GROUP --

*August 31, 1998*

## **CLOSURE ITEMS**

- MACT Floor Recommendation for Natural Gas and Fuel Oil Boilers.  
  
Documentation and rationale for Work Group determination of MACT floors for existing boilers firing natural gas or fuel oil
- HAPs of Interest for Fossil Fuel Fired Boilers  
  
Documentation of the selection of HAPs of interest for boilers firing fossil fuels

## **WORKS-IN-PROGRESS**

- Control technology rankings  
  
Ranking of control devices on their effectiveness in reducing emissions of metallic, inorganic, organic, and mercury HAPs from boilers burning solid, liquid, or gaseous materials.
- Economics task group analyses  
  
Compilation of analyses conducted by boiler economics task group, including sensitivity analyses of control device costing algorithms, and distribution of boilers by SIC
- Subcategories for boilers firing wood, non-fossil materials, and coal  
  
Compilation of subcategories developed for boilers firing wood, coal, or non-fossil materials and the number of boilers that would be in each subcategory. Proposed rationale for wood subcategories are also provided.
- Model boilers for boilers firing wood, fossil, and non-fossil materials  
  
Compilation of model boilers developed by Boiler Work Group for boilers firing wood, fossil, or non-fossil materials. Compilation shows the characteristics of each model and includes the number of boilers in each model.

- HAPs of interest for wood-fired boilers and digester gas fired boilers  
  
Compilation of work done on developing HAPs of interest for wood and digester gas fired boilers, including opposing viewpoints by members of the Work Group. Compilation also contains a discussion of the methodology used to select HAPs of interest.
- Preliminary MACT floor analyses for wood and non-fossil boilers  
  
Compilation of work done on developing preliminary MACT floors based on control technologies for wood and non-fossil boilers
- Analyses of Good Combustion Practices  
  
Draft tables summarizing good combustion practices required in State regulations
- De minimus levels for boilers subject to Section 129  
  
Draft rationale discussing the need for de minimus levels for boilers subject to Section 129, and a recommendation of the de minimus level

## **DATA/INFORMATION**

- Corrections made to Inventory Database  
  
Revised inventory database that contains changes made by members of the boiler Work Group to version 3 of the inventory database
- State regulations on boilers [hardcopy]  
  
Compilation of State regulations for boilers and tables summarizing the information
- Material analyses information not included in materials analyses database [hardcopies]  
  
Compilation of materials analyses information (ultimate analyses, metals, analyses, etc) gathered by members of the Boiler Work Group on materials burned that have not been incorporated into the materials analyses database.
- Results of literature search conducted by boiler testing task group [hardcopy]

Compilation of emissions and materials analyses information gathered by members of the boiler testing task group from literature sources.

**CLOSURE ITEMS, WORKS-IN-PROGRESS, AND DATA/INFORMATION**  
**FOR COORDINATING COMMITTEE REVIEW**

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**--PROCESS HEATERS WORK GROUP--**

**Closure Items:**

None

**Works-In-Progress:**

Rationale for determination of MACT for indirect-fired process heaters

- Draft documentation paper presenting the rationale for a work group recommendation of “no MACT floor” (i.e., no best performing top 12 percent) and no beyond-the-floor MACT for gas- and fuel oil-fired indirect-fired process heaters. Preliminary findings for other fuels are also presented.

White paper on coke oven gas

- Presentation made at the Long Beach meeting supporting treatment of coke oven gas as being “equivalent to natural gas.”

Status report on “other-fired” indirect process heaters

- Summary of work done to-date on the “other-fired” category of process heaters with preliminary results regarding controls, etc.

Flow-chart of indirect-fired process heaters

- This flow chart begins with the inventory data base and charts the decisions made regarding the disposition of each type of process heater and the numbers involved. It is the foundation of the basis for evaluating the number of controlled units vs. the total number of units in any preliminary fuel subcategory, subsequent MACT floor determinations, etc.

**Data/Information:**

Refined Inventory Database

- Includes latest version of database that has been reviewed for accuracy and made more usable for PHWG analyses

Emissions Database

- Includes latest version of database

Survey Database

- Includes latest version of database



## CLOSURE ITEMS, WORKS-IN-PROGRESS, AND DATA/INFORMATION FOR COORDINATING COMMITTEE REVIEW

-- INCINERATOR WORK GROUP --

*August 31, 1998*

### **CLOSURE ITEMS**

- Regulatory Alternatives Paper (RAP), dated 9/8/98

*Final version of RAP incorporating revisions since the last CC meeting.*

### **WORKS-IN-PROGRESS**

- None

### **DATA/INFORMATION**

- Operating Non-hazardous Solid Waste Incinerators Identified by the Incinerator Work Group, dated 9/3/98 (hard copy)

*Compilation of data sheets listing facilities identified by the Incinerator Work Group and its subteams.*

- Development of Incinerator Work Group Subteam #1 Facility List, dated 8/31/98 (hard copy)

*Memorandum documenting the process followed by Subteam #1 in compiling its lists of operating pathological waste incinerators and crematories.*

- Development of Incinerator Work Group Subteam #2 Facility List, dated 9/2/98 (hard copy)

*Memorandum documenting the process followed by Subteam #2 in compiling its lists of operating miscellaneous industrial and commercial waste incinerators.*

- Procedure/Documentation, Subteam #3, dated 8/28/98 (hard copy)

*Document describing the process followed by Subteam #3 in compiling its lists of operating wood, construction & demolition, and agricultural waste incinerators.*

- Development of the IWG Subteam #4 Database, dated 8/12/98 (hard copy)

*Memorandum documenting the process followed by Subteam #4 in compiling its lists of operating drum reclaimer furnaces and parts reclaimer burnoff units.*

- Environmental Threats to Children, dated 6/25/98 (hard copy)

*Memorandum from Keith Harley, Chicago Legal Clinic, addressing the discussion of childrens health issues in the Regulatory Alternatives Paper.*

- Environmental Threats to Children, dated 6/25/98 (hard copy)

*Letter from Norm Morrow, Exxon Chemical Americas (personal letter not representing the Incinerator Work Group), addressing points raised in Keith Harley's memorandum.*

The Testing and Monitoring Protocol Work Group submits the following documents to the Coordinating Committee for the purpose of transmittal to the Environmental Protection Agency.

### **1. Closure items.**

A. TMPWG Guidance Document on Interpreting and Using Emission Databases Containing Non-detection Values. This document has been posted ( with 2 minor wording differences in the title) since September 29, 1997 File: *tmdetect.wpd*

### **2. Works-in-progress. - None**

### **3. Data/information.**

A. Formaldehyde Measurements by the DNPH Methods: A Review by the Testing and Monitoring Workgroup - July 8, 1997. This file has been posted since July 14, 1997. File: *Formald1.wpd*

B. TMPWG Discussion of Real Time Measurement Options to IC Engine SWG - September 5, 1997 This file has been posted since September 8, 1997 File: *tmrealtm.wpd*

C. Typical Products of Incomplete Combustion (PICs) from industrial combustion sources that are also Hazardous Air Pollutants (HAP's) - November 7, 1997 This file has been posted since November 7, 1997. File: *tmpicgd.wpd*

D. *Review of Compliance Test Methods for Determining Formaldehyde Emissions from IC Engines and Turbines with Potential Application to other Combustion Sources – This document is a new consensus TMPWG product; it has not been previously posted.* File: *formald2.wpd*

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## **General ICCR Items for September CC Meeting**

### **Work-In-Progress:**

#### Coordinating Committee (CC) Guidance to Work Groups (WG) on Operator Training

- Guidance on operator training approved by CC at April 1998 CC meeting and forwarded to WGs for consideration (CC board, miscellaneous files, 5/12/98, "P2optn.pdf or .wpd").

#### CC Guidance to WGs on P2 Metrics

- Guidance on pollution prevention metrics approved by CC at April 1998 CC meeting and forwarded to WGs for consideration (CC board, miscellaneous files, 5/12/98, "P2metric.pdf or .wpd").

#### CC Guidance to WGs on P2 Regulatory Approaches

- Guidance on pollution prevention regulatory approaches approved by CC at April 1998 CC meeting and forwarded to WGs for consideration (CC board, miscellaneous files, 5/12/98, "P2regopt.pdf or .wpd").

#### Good Combustion Practice Guidance

- Guidance on good combustion practices approved by CC at February 1998 CC meeting and forwarded to WGs for consideration (CC board, miscellaneous files, 3/20/98, "gcp.pdf or .wpd").

### **Information/Data:**

#### Dioxin Primer Presentation

- Presentation on dioxin formation and control presented by EPA/ORD and EER at September 1997 ICCR meeting (CC board, old archived files, 1/6/98, "dioxinpr.pdf").

#### ICR Survey Database Version 2.0

- Database of responses to EPA information collection request (ICR) combustion unit survey, version 2.0, in Access 2.0. (General Information board, information collection area, 3/13/98, "surveyv2.exe".)

#### Inventory Database Version 3.0 and Associated Documentation Tables

- EPA inventory database of combustion unit locations and characteristics, version 3.0, an Access 2.0 and associated tables documenting changes

made to the database, records deleted from version 3.0, sources of information [General Information board, information collection area, “iccrv3.exe” (3/12/98), and documentation tables, “iccrref.exe” (2/19/98), “iccrdel.exe” (2/19/98), and “source.xls” (4/30/97)].

Additional inventory data submitted to EPA by the Department of Defense (DoD) and the American Metropolitan Sewerage Agencies (AMSA) after release of the survey database version 2.0 and the inventory database version 3.0.

Emission test databases for each of the five source WGs, most recent versions, as follows:

- Emission test database versions 2.0 and 3.0 for combustion turbines [Combustion Turbine board, miscellaneous files, “etd2\_ct7.zip” (in Access 97, 2/5/98) and “etd2\_ct.zip” (in Access 2.0, 1/8/98). Version 3.0 to be posted by September 9. Will contain additional test reports and replace version 2.0].
- RICE emissions database version 2.0 [IC Engines board, miscellaneous files, “etd2\_ice.zip” (in Access 2.0, 3/16/98), and “etd2\_ice7.zip” (in Access 97, 3/16/98)].
- Supplements to boilers emission test database, versions 4.1, 4.2, and 4.3 in Access 2.0 [Boilers board, miscellaneous files, “finblr42.exe” (version 4.2, 8/6/98) and “finblr41.exe” (version 4.1, 6/30/98). Third supplement to be posted in September (version 4.3)].
- Emission test database version 3.0 - boilers, in Access 2.0 (Boilers board, miscellaneous files, “etdblrv3.exe”, 4/28/98).
- Emissions test database version 3.0 - Process Heaters, in Access 2.0 (Process Heaters board, miscellaneous files, “etdphv3.exe”, 4/28/98).
- Supplements to incinerators emission test database, version 4.1, 4.2, and 4.3, in Access 2.0 [Incinerators board, miscellaneous files, “fininc42.exe” (version 4.2, 8/6/98), and “fininc41.exe” (version 4.1, 6/30/98). Third supplement to be posted in September (version 4.3).]
- Emission test database version 3.0 - incinerators and flares (Incinerators board, miscellaneous files, “etdincv3.exe”, 4/28/98).

#### Materials Analysis Database Version 1.0

- Contains chemical analyses of fuels and wastes submitted in ICR survey responses and contained in some wood test reports from versions 1 and 2 of emission test database, in Access 2.0 (General Information board, information collection area, 8/28/98, “matv1.exe”).

Meeting minutes with attachments from CC meetings and all subgroups and task groups formed by the CC, including the information collection subgroup, solid waste definition subgroup, and pollution prevention subgroup. Meeting minutes are on the TTN (CC board) and in the project docket.

Meeting minutes with attachments from all meeting of the seven WGs and all subgroups and task groups formed by the WGs. Meeting minutes are on the TTN (on each WG board) and in the project docket.

**Previous Recommendation:**

Information collection plan and survey recommendations from CC to EPA. The CC recommendation, information collection subgroup report, and survey form are documented in the minutes of the March 19 and 20, 1997 CC meeting (section 3.2 of the meeting summary text and attachments 4 and 5). (The meeting minutes including the attachments are on the CC board, under old archived files, 1/6/98, "cc19ma71.pdf".)